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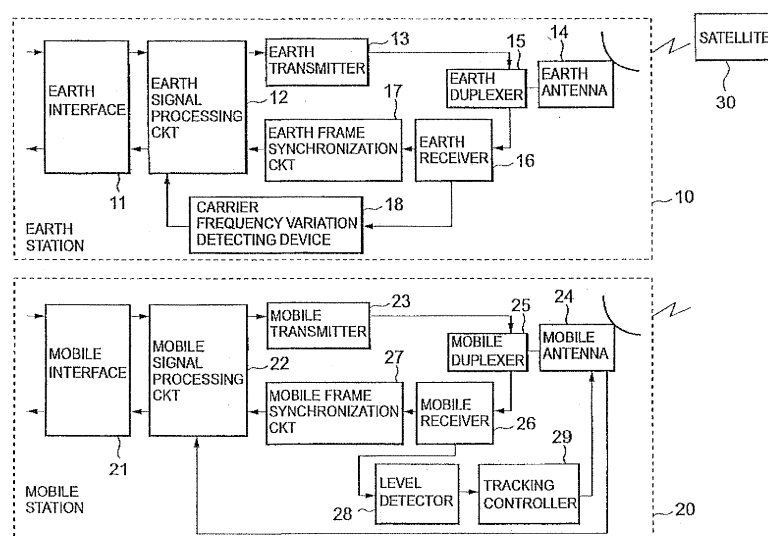
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(54) **A mobile satellite communications system and method**

(57) A method of carrying out communications via a communications satellite (30) between an earth station (10) and a mobile station (20) with an automatic tracking type antenna (24), said earth station transmitting, to said mobile station, a modulated signal into which a carrier signal is modulated by an information signal supplied thereto, said earth station periodically transmitting a burst carrier signal to said mobile station when the information signal is not supplied thereto, said earth station receiving a received signal from said mobile station, wherein said

burst carrier signal has a burst transmission duration, characterized in that said method comprises the steps of: continuously transmitting (17, 12), from said earth station, the carrier signal to said mobile station when said earth station cannot establish a frame synchronization for the received signal; and extending (16, 18, 12), in said earth station, the burst transmission duration for the burst carrier signal when said earth station receives, from said mobile station, a carrier signal having a carrier frequency which varies with variation exceeding a reference value (Fig. 1).



**FIG.1**



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 07 11 9013

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 25 February 2008	Examiner Bischof, Jean-Louis
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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